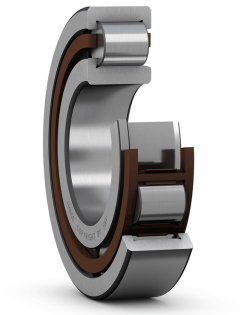

SKF NJ 203 ECP

Single row cylindrical roller bearing, NJ design

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one on the inner ring, NJ design bearings can accommodate axial displacement in one direction. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.

Technical specifications

Dimensions	
Bore diameter	17 mm
Outside diameter	40 mm
Width	12 mm
Shoulder diameter of inner ring	25 mm
Shoulder diameter of outer ring	32 mm
Raceway diameter of inner ring	22.1 mm
Chamfer dimension	0.6 mm
Chamfer dimension	0.3 mm
Permissible axial displacement	1 mm

Abutment dimensions	
Diameter of spacer sleeve	20.7 mm
Diameter of spacer sleeve	21.1 mm
Diameter of shaft abutment	27 mm
Diameter of housing abutment	36 mm
Radius of fillet	0.6 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	20 kN
Basic static load rating	14.3 kN
Fatigue load limit	1.73 kN
Reference speed	20000 r/min
Limiting speed	22000 r/min
Minimum load factor	0.15
Limiting value	0.2
Calculation factor	0.6

Performance	
Basic dynamic load rating	20 kN
Basic static load rating	14.3 kN
Reference speed	20000 r/min
Limiting speed	22000 r/min
SKF performance class	SKF Explorer

Properties	
Bearing part	Complete bearing
Axial displacement capability	In one direction
Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Non-metallic
Number of flanges, outer ring	2
Number of flanges, inner ring	1
Loose flange	None
Radial internal clearance	CN
Tolerance class	Normal

Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	0.25 kg CO₂e

Logistics	
Product net weight	0.07 kg
eClass code	23-05-09-01
UNSPSC code	31171505

SKF drawings